

## ABSTRACT

The present invention generally relates to an electrolyte solution used to manufacture an electrolytic copper foil for a secondary battery electrode collector and a printed circuit, and based on a 1-liter electrolyte solution, the present invention contains: 0.5 to 40 mg of at least one sulfur compound selected from a disulfur compound, dialkylamino- T-oxomethyl- thioalkan sulfonic acid, and thioalkan sulfonic acid salt; 1 to 1000 mg of at least more than one kind of an organic compound selected from a group consisting of a poly akylene glycol-type surfactant and low molecular gelatin; and 0.1 to 80 mg of chlorine ion.

The electrolytic copper foil in accordance with the present invention has a roughness Rz is less than 2.0  $\mu\text{m}$ , if the electrolytic copper foil is in a thin film state, and has the roughness Rz value of the rough surface within a range of 1.0~3.5  $\mu\text{m}$  if the surface of the electrolytic copper foil is treated. Since a roughness value of a polished surface is changed according to polishing of a cathode surface, there is no special restriction.

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